

Anthrax Information for Contacts – Farms and similar settings

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This is a factsheet for people who may have been exposed to anthrax in a farm setting or through other contact with infected animals or animal products in New South Wales.

Key facts

- Anthrax occurs among grazing animals in many parts of the world, including livestock in parts of NSW.
- Handling infected animals or their carcasses represents a potential infection risk to people.
- Anthrax in livestock is reported in a few NSW properties each year, but anthrax is a very rare disease in humans.
- While the risk is low, people who may be exposed to an anthrax- infected animal or carcass should take safety precautions and closely monitor their health.

What is anthrax?

- Anthrax is a disease caused by infection with bacteria called *Bacillus anthracis*.
- Anthrax is mainly a disease of grazing animals (especially cattle, sheep and goats), but people who work with these animals or their products can rarely become infected.
- The bacteria most commonly leads to the cutaneous (skin) form of the disease. Anthrax can also rarely cause a gastro infection (the intestinal form) or pneumonia (the inhalational form).
- In NSW, anthrax has been most commonly reported from properties in the ‘anthrax belt’, an area stretching down the middle third of the state where anthrax spores may be found in soil.

How do people become infected with anthrax?

- Humans usually get anthrax from direct contact with infected animals, or animal products such as wool, meat or hides. In almost all cases, anthrax bacteria enter through broken skin or wounds to cause cutaneous anthrax.
- Anthrax bacteria may remain in the soil for many years in the form of spores. These spores are usually the cause of infections in farm animals who become exposed while grazing.
- Human infections are very rare. Only three human cases of anthrax infection (all cutaneous cases) have been reported in NSW since 1991, and all were acquired while working on farms in South West NSW.
- Anthrax infections are occasionally reported in other countries following consumption of poorly prepared meat from infected animals (intestinal anthrax) or breathed in after being deliberately released (inhalational anthrax).
- There have been no recent reports of intestinal or inhalational anthrax in Australia, and the risk of these infections following agricultural exposure in Australia is believed to be very low.
- Anthrax is not transmitted from person to person.

What are the symptoms of anthrax?

- People who contract cutaneous anthrax usually develop characteristic skin sores. These usually begin as one or more raised itchy bumps that resemble insect bites. These develop into black centred, painless skin sores from 3 to 10 days (usually between 5 and 7 days) after exposure.
- The skin sores can be associated with swelling of the surrounding skin and of nearby lymph nodes.
- Anthrax symptoms can also include fever and other flu-like symptoms such as a cough (usually dry), chest discomfort, shortness of breath, fatigue, and muscle aches.

How is anthrax treated?

- Antibiotics (including penicillin, doxycycline, and ciprofloxacin) are effective at treating anthrax infections.
- While these infections are very serious, most people who receive prompt antibiotic treatment make a full recovery.

Are antibiotics recommended to prevent anthrax?

- Antibiotics are not routinely recommended for people without symptoms of anthrax.
- A short course of antibiotics may be recommended for people following a high risk exposure, such as a person who was not using personal protective equipment, whose skin was contaminated with fluids from the carcass, and who had abrasions on their skin.

Is there a vaccine for anthrax?

- A vaccine against anthrax is not licensed for civilian use in Australia. Anthrax vaccines are sometimes recommended in military or laboratory settings but are not useful in preventing anthrax after exposure.

Personal Protective Equipment (PPE) guidance for anthrax response workers

- The NSW Department of Primary Industries recommends not handling, moving, opening or skinning the carcass of anthrax-infected animals. Be guided by DPI officials or local veterinarians on the safe disposal of carcasses.
- Wherever possible, animals known or suspected to have anthrax should not be touched directly.
- If close contact with infected animals cannot be avoided, personal protection measures recommended for anthrax response workers include the following:
 - Ensuring that all skin wounds are protected with sealed waterproof dressings, and avoiding any direct (bare skin or clothing) contact.
 - Wearing appropriate PPE – that is, disposable overalls, P2 face-masks (high-efficiency masks), rubber or latex gloves and boot covers.
 - Safely disposing of PPE – burn all protective gear where you take it off, or ensure it cannot blow away so it can be burnt later with the carcass.
 - Washing your hands well with soap and water before putting on PPE and after removing or handling potentially contaminated PPE.

Self monitoring by anthrax response workers and other exposed people

- Workers and other people who have been in close contact with anthrax-infected animals should self monitor their health for at least 10 days after the last exposure.
- Self monitoring means watching for **any new symptoms of illness**, particularly the following:
 - Skin sores – especially on your face, hands or arms, beginning as a raised itchy bump that resembles an insect bite which develops into a painless ulcer, with a characteristic black area in the centre.
 - Swollen lymph glands (such as in the neck, armpits or groin) nearest the skin sore area
 - Fever (check with a thermometer), or chills or shakes
 - Cough (usually dry), chest discomfort, shortness of breath, fatigue, muscle aches.

If new symptoms are detected:

- Any new symptoms should be reported to your local Public Health Unit (see contact details below).
- Arrange to see a doctor immediately and say that you may have been in contact with anthrax.
- **In a medical emergency always seek immediate health care or phone 000.**

Public Health Unit Contact Details

- To contact your local Public Health Unit call **1300 066 055**.

Additional Information:

- NSW Health Anthrax Factsheet: www.health.nsw.gov.au/factsheets/infectious/anthrax.html
- NSW Department of Primary Industries PrimeFact 114 – Anthrax Factsheet: <http://www.dpi.nsw.gov.au/aboutus/resources/factsheets/primefacts/?a=52312>